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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,118	09/04/2001	Takaharu Hutamura	11-058	1726

23400 7590 11/12/2002

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EXAMINER

NGUYEN, DANNY

ART UNIT PAPER NUMBER

2836

DATE MAILED: 11/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohya et. al. (USPN 5,121,011).

Regarding to claims 1, 5, 6,10, 11, 15, Ohya et. al. disclose a drive circuit for driving a switching element (see fig. 4) comprises a high-side switching circuit (Tr3) connected between power supply line (Vcc); a low-side switching circuit (Tr4) connected in series with the high-side switching circuit through an output terminal (n1) leading to the switching element (Tr1); a voltage detector (DIV1) detecting a voltage appearing at the output terminal, wherein the low-side switching circuit is controlled to be turned off when the voltage detected by the voltage detector is lower than an off-decision voltage which is defined within a voltage range in which the switching element is in off-state (see col. 6, lines 2-7), and wherein the high-side switching circuit is turned off when the voltage detected by the voltage detector is higher than an on-decision voltage which is defined within a voltage range in which the switching element is in on-state (see col. 7, lines 2-10).

Regarding to claims 2- 4, 8, 12, Ohya et. al. disclose the low-side switching circuit includes an output transistor (Tr1), a pre-driver (Tr13) (see fig. 5) driving the output transistor, a comparing circuit (TC3) comparing the output voltage detected by the voltage detector with the off state decision voltage, and a logic circuit (11b) controlling an operation of the pre-driver base on the result of comparison in the comparing circuit.

Regarding to claims 9 and 14 repeat the limitations of claim 4, therefore rejected accordingly.

Regarding to claims 7 and 13, Ohya et. al. disclose the high-side switching circuit includes an output transistor (Tr2), a pre-driver (Tr11) (see fig. 5) driving the output transistor, a comparing circuit (TC4) comparing the output voltage detected by the voltage detector with the on state decision voltage, and a logic circuit (11a) controlling an operation of the pre-driver base on the result of comparison in the comparing circuit.

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (703)-305-5988. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703)-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9318 for regular communications and (703)-872-9319 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

DN
DN
November 7, 2002

Stephen W. Jackson
11-8-02

STEPHEN W. JACKSON
PRIMARY EXAMINER